

## PATENT ABSTRACTS OF JAPAN

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(71)Applicant : KOITO MFG CO LTD

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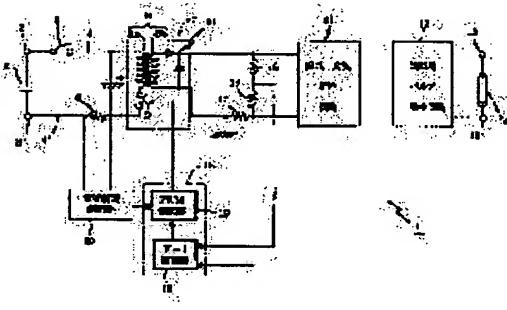
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 TODA ATSUSHI

## (54) DISCHARGE LAMP LIGHTING CIRCUIT

## (57)Abstract:

PURPOSE: To prevent a circuit from reaching thermal breakdown by an electric current flowing to a DC electric power supply circuit in the early stage of lighting of a discharge lamp due to reduction in DC electric power supply voltage.

CONSTITUTION: A lighting circuit 1 has a switching regulator system DC electric power supply circuit 7. A control circuit 15 is transferred to constant power control of a discharge lamp after light emission of the discharge lamp is promoted by supplying electric power exceeding rated power in the early stage of lighting of the discharge lamp 14 according to a detecting signal related to output voltage and an electric current of the DC electric power supply circuit 7. An electric current detecting resistance 6 is arranged to detect an input current to the DC electric power supply circuit 7, and an electric current limiting part 20 is arranged to limit an electric current to the input current to the DC electric power supply circuit 7 according to the detecting signal, and an electric current limiting degree is gradually intensified as time passes from actuation starting time of the DC electric power supply circuit 7.



## LEGAL STATUS

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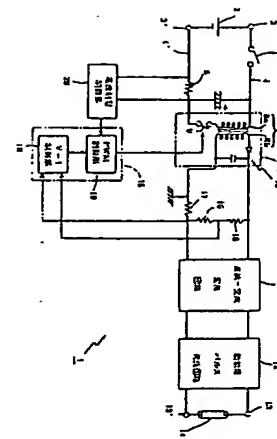
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6 乾流取出抵抗 (乾流取出手段)  
 7 直流電源回路  
 8 トランジスタ  
 9 半導体スイッチ素子  
 11 乾流-交流变换回路  
 14 メタルハイドランジ (放電灯)  
 15 制御回路  
 19 PWM制御部 (パルス幅制御手段)

20 乾流制限制御部 (乾流制限制御手段)  
 1A 放電灯の点灯回路  
 20A 乾流制限制御部 (乾流制限制御手段)  
 42 カレントトランジ (乾流取出手段)  
 1B 放電灯の点灯回路  
 20B 乾流制限制御部 (乾流制限制御手段)  
 55 乾流取出抵抗 (乾流取出手段)

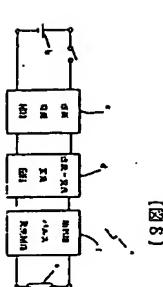
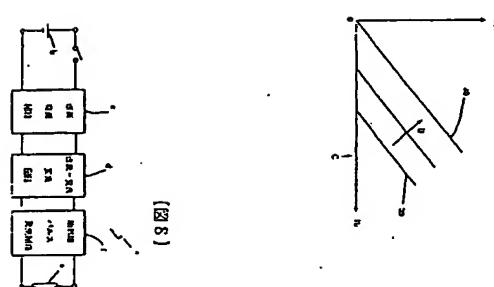
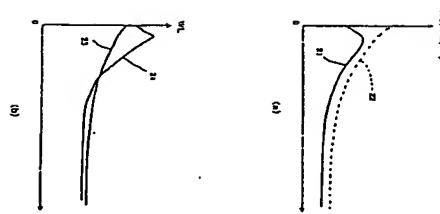
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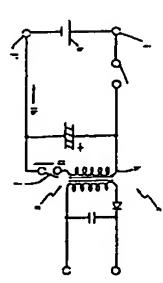
[図2]

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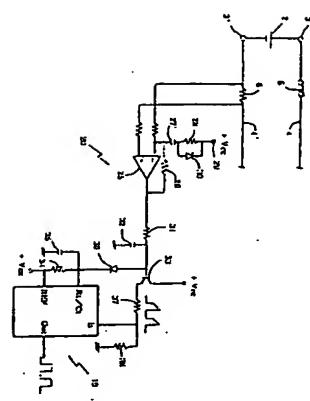


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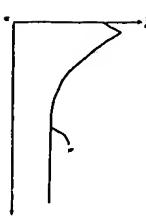


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[図3]

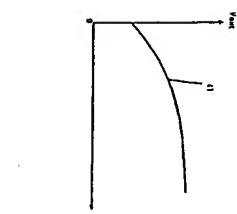


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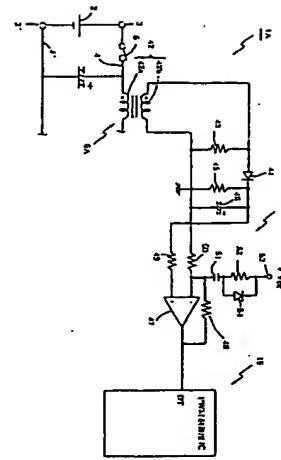


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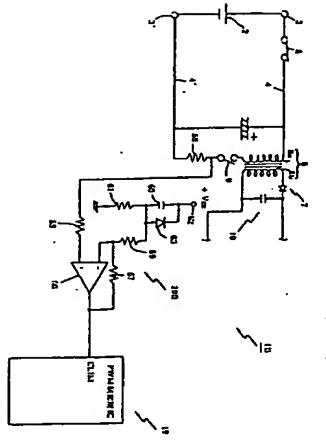
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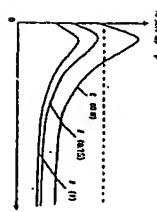
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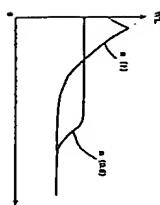
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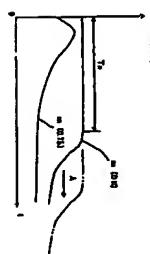
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